Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
	)	
Ensuring Customer Premises Equipment Backup Power for Continuity of Communications	)	PS Docket No. 14-174
	)	
Technology Transitions	)	GN Docket No. 13-5
	)	
Policies and Rules Governing Retirement Of Copper Lines by Incumbent Local Exchange Carriers	)	RM-11358
	)	
Special Access for Price Cap Local Exchange Carriers	)	WC Docket No. 05-25
	)	
AT&T Corporation Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services	)	RM-10593

COMMENTS OF THE ALARM INDUSTRY COMMUNICATIONS COMMITTEE

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SUMMARY

AICC supports the Commission's proposal to require facilities-based fixed voice services that are not line-powered to provide backup power that is capable of powering their customers' CPE during the first eight hours of an outage. However, AICC urges the Commission to expand a backup power requirement in two ways. First, broadband network facilities also should have backup power. All broadband networks should be required to provide twenty-four (24) hours of standby power supply capacity for communications equipment that is field deployed and twenty-four (24) hours of standby power supply capacity for communications equipment located at the central office or its equivalent. Second, these requirements also should apply to wireless broadband networks and services. Under this proposal, for example, every cell site in a wireless system should have a mandatory twenty-four (24) hours of power backup.

AICC contends that D Cell batteries are not an acceptable power source to ensure continued operation of voice communications, including access to 911 and life/safety applications because of their unreliability, including their likelihood to corrode when not properly maintained and replaced. Other types of batteries, such as but not limited to Lithium-Ion and lead acid batteries, have a much greater life-span and would be more reliable options. No matter what battery is used, however, it should be rechargeable.

AICC supports a requirement that customers must be given direct notice when a carrier intends to retire the copper facilities that serve the customer and the customer must be informed of the consequences of that action, including the fact that the customer will not have communication service during a power outage without a source of backup power. A notice period of a minimum of six months should be provided to give customers an opportunity to

object or otherwise provide comment to the Commission and/or to seek an alternative service provider. AICC also supports a requirement that ILECs file an annual forecast with the Commission listing the central offices in which they intend to retire copper during the year and that an ILEC should be required to publish notice in the general media when it provides notice to customers that copper facilities will be retired in a specific area.

The Commission should consider attributes such as network capacity, call quality, device interoperability, 911 service, and call functionality when determining whether a service is an adequate substitute for a retail service a carrier seeks to discontinue. In addition, the Commission should consider whether the alternative service is functionally equivalent to traditional TDM-based telephone service with respect to dialing, dial plan, call completion, carriage of signals and protocols, and loop voltage treatment and whether it includes eight (8) hours of standby power supply capacity for provider provided CPE and twenty-four (24) hours of standby power supply capacity for the network provider's facilities, both field deployed and at the central office or equivalent facility. Further, an alternative service that results in a change in 911 service, device interoperability, or call functionality that is available to the consumer, or that fails to provide the consumer with the ability to maintain communication service during a power outage, would result in a reduction or impairment of service sufficient to deny a request for Section 214 discontinuance of service.

Finally, although the alarm industry has had some success in trying to resolve issues on a voluntary basis with broadband providers, an entirely voluntary process has not been sufficient to "ensure" that alarm monitoring systems can transmit alarm signals properly during emergency situations. The proposals supported by AICC in these comments should help to ensure that

consumers have access to communication services that are compatible with alarm services before TDM-based services can be discontinued. In addition, however, AICC encourages the Commission to make available a process where the parties could discuss their issues and/or differences with the Commission to try to reach a resolution when a voluntary process is unsuccessful.

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COMMENTS OF THE
ALARM INDUSTRY COMMUNICATIONS COMMITTEE

The Alarm Industry Communications Committee ("AICC"), on behalf of its members[1] hereby files comments on the Commission's Notice of Proposed Rulemaking (NPRM) addressing a number of issues in connection with copper retirement and the transition of networks to Internet Protocol (IP), including backup power, the network change notification

[1] Central Station Alarm Association (CSAA), Electronic Security Association (ESA), Security Industry Association (SIA), Bosch Security Systems, Digital Monitoring Products, Digital Security Control, Telular Corp, Honeywell Security, Vector Security, Inc., ADT Security Services, AES-Intellinet, Alarm.com, Bay Alarm, Intertek Testing, NetOne, Inc. (formerly, Security Network of America), United Central Control, AFA Protective Systems, Vivint (formerly APX Alarm), COPS Monitoring, DGA Security, Universal Atlantic Systems, Axis Communications, Interlogix, LogicMark, Napco Security, Alarm Detection, ADS Security, ASG Security, Monitronics, Select Security, Inovonics, Linear Corp., Numerex, Tyco Integrated Security, FM Approvals, Underwriters Laboratories, CRN Wireless, LLC and ipDatatel.

process and Section 214 discontinuance. AICC agrees with and supports the goals enunciated by the Commission to ensure reliable backup power for consumers of IP-based voice and data services; to protect consumers by ensuring they are informed about their choices and the services provided to them; and to ensure that the change of a network facility or discontinuance of service does not deprive consumers of the ability to choose the services they need. AICC supports the adoption of a number of the Commission's proposals to further these goals. In addition, AICC urges the Commission to adopt a number of additional measures, as discussed herein, to further these goals.

Introduction

AICC member companies protect over 30 million residential, business and sensitive facilities and their occupants from fire, burglaries, sabotage and other emergencies and, consequently, are an integral part of the public safety network. Approximately one-third of Americans today live in, work in and go to premises where security systems are utilized. In addition to protecting commercial and governmental applications, including power plants, hospitals, dam and water authorities, chemical plants, banks and schools, alarm companies protect a large and increasing number of residences and their occupants from fire, intruders, and carbon monoxide poisoning. Alarm companies also provide Personal Emergency Response System (PERS) service for obtaining medical services and ambulances in the event of medical emergencies. Because AICC's members act as the first line of defense during emergency situations for so many homes and businesses, it is essential that the communication networks they utilize are reliable and stable and transmit alarm data and signals accurately. The ability to promptly and accurately respond to an emergency can mean the difference between life and death for those protected by this industry.

Alarm service providers and their customers utilize many types of communication technologies and services in connection with the provision of alarm services, including traditional telephone service, wireline and wireless broadband services, and the Internet. Many alarm customers still rely on TDM-based telephone service as their underlying communication service and a majority of customers of PERS service are connected by TDM-based telephone service. Because the TDM-based network was engineered to be highly reliable, with quality of service standards and with an independent power source, traditional TDM-based telephone service provides alarm customers with a highly reliable service that meets the standards necessary for fire protection and other life/safety applications. In addition, TDM-based service allows other necessary functions for alarm services, including line seizure, the detection of a loss in communications path and the proper encoding and decoding of tone messages sent by the alarm panel.

As TDM-based networks are transitioned to both wireline and wireless Internet Protocol (IP)-based networks and with the advent of alternative communication providers and services, these traits must be preserved. It is imperative that there are reliable and stable communications networks and services, no matter the technology, that those networks are consistent, and that consumers understand the nature of any changes to their communications service, especially those that may affect the consumers ability to reach emergency services. In furtherance of this objective, AICC comments on the Commission's specific proposals as follows.

AICC Supports a Backup Power Requirement

One of the primary issues that affects the reliability of broadband networks is the inability of broadband networks and service to function during power outages. In the NPRM, the Commission seeks comment on rules to ensure continuity of power for customer premises

equipment (CPE) on residential fixed networks by adopting baseline requirements for backup power during commercial power outages. The Commission proposes to require providers of facilities-based fixed voice services (including interconnected VoIP) that are not line-powered to provide backup power that is capable of powering their customers' CPE during the first eight (8) hours of an outage.

AICC supports the Commission's proposal to require facilities-based fixed voice services that are not line-powered to provide backup power that is capable of powering their customers' CPE during the first eight hours of an outage. However, AICC urges the Commission to expand a backup power requirement in two ways. First, broadband network facilities also should have backup power. All broadband networks should be required to provide twenty-four (24) hours of standby power supply capacity for communications equipment that is field deployed (such as DSLAMS and VRADS) and twenty-four (24) hours of standby power supply capacity for communications equipment located at the central office or its equivalent. Second, these requirements also should apply to wireless broadband networks and services. Under this proposal, for example, every cell site in a wireless system should have a mandatory twenty-four (24) hours of power backup.

Backup power requirements should be adopted to protect consumers and to meet the Commission's mandate to promote the national defense and the safety of life and property. Title I, Section 1 of the Communications Act of 1934, as amended, states that the purpose of the Commission is to make available communication service to all people of the United States "for the purpose of the national defense" and to promote "safety of life and property through the use of wire and radio communication." Requiring backup power for CPE and broadband network facilities and services furthers this mission.

In addition, backup power requirements are necessary to protect consumers. Historically, one of the reasons the traditional TDM-based network has been highly reliable is due to the fact that copper facilities are powered by the central office. Therefore, life-saving communications service has remained available to consumers even during power outages. Many consumers have come to expect and rely on this feature. Further, many consumers have refused to move their business or residence to only broadband service because broadband networks do not have a comparable feature or at least provide an acceptable backup power option.

The National Fire Protection Association (NFPA) developed a standard for voice services used in connection with fire protection, NFPA 72,[2] to ensure that service providers using new technologies continue to meet the rigorous quality assurance, operational stability and consistent features that were the hallmarks of the traditional networks operated by telephone companies. Pursuant to NFPA 72, a managed facilities-based voice network (MFVN) should be functionally equivalent to traditional TDM-based telephone service provided by authorized common carriers with respect to dialing, dial plan, call completion, carriage of signals and protocols, and loop voltage treatment. In addition, MFVN must provide a number of features, including eight (8) hours of standby power supply capacity for MFVN communications equipment located at the protected premise, eight (8) hours of standby power for equipment that is field deployed and twenty-four (24) hours of standby power supply capacity for MFVN communications equipment located at the communication service provider's central office. AICC recommends a similar standard should be required by the Commission, except that AICC recommends that all network facilities should have twenty-four hours of backup power.

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[2] NFPA 72 2013 Edition, Section A.3.3.152.

In the NPRM, the Commission also asks whether sufficient backup power should only be required for minimally essential communications, including 911 calls and the receipt of emergency alerts and warnings. It is not clear how this would be done or how it would be explained to consumers so that they would know how long their communications would continue to operate during a power outage. In any event, AICC believes the better approach would be to follow the Underwriters Laboratories (UL) procedure for backup battery capacity, which requires the ability to allow some communications for an extended time even after the required battery life.[3]

The Commission asks whether broadband providers should have any responsibility to monitor battery status and determine whether the battery has degraded. A backup power system should provide an on premise automatic audible and visual indication when the battery is low or degraded in a manner in which the consumer is highly likely to be aware. In addition, to improve the effectiveness of notification to the consumer, the backup power system could include a self-monitoring feature that notifies the consumer (via voice call or voice mail, email or text messaging, depending on what is available to the consumer) when the backup power system is in use and/or when it is running low. A backup power system that provides an audible alarm sound only at the premise would not be effective if the consumer is not at home or otherwise does not hear the alert, which is entirely possible if the battery backup unit is outside or in the garage.

[3] For example, UL 19.1 requires a battery of sufficient capacity to supply the maximum power to the system for 24 hours in the intended standby condition and thereafter, to be able to operate the control unit for fire alarm signals for at least 4 minutes continuously.

The Commission also seeks comment on the use of D-cell batteries and the costs and benefits of requiring consumers to purchase a sufficient number of D-cell batteries to provide continuing backup power and on Lithium-Ion external battery packs. In its recent filings concerning the replacement of copper facilities with fiber, Verizon stated that it is rolling out a new battery backup option that uses standard D Cell batteries that will give customers more control over battery backup during commercial power outages. However, as shown by AICC, D Cell batteries are not an acceptable power source to ensure continued operation of voice communications, including access to 911 and life/safety applications because of their unreliability, including their likelihood to corrode when not properly maintained and replaced. The alarm industry stopped using primary cell batteries (like D Cell batteries) by the early 1970's for this reason. Other types of batteries, such as but not limited to Lithium-Ion and lead acid batteries have a much greater life-span and would be more reliable options. No matter what battery is used, however, it should be rechargeable.

Customers and Businesses Should be Provided Notice of Copper Retirement

In the NPRM, the Commission proposes changes to its network change notification process for copper retirement to better inform customers that will be affected by the retirement of copper facilities. Among other things, the Commission proposes to require carriers to provide retail customers with direct notice of copper retirement and its "practical consequences." The Commission seeks comment on when the expanded notification requirement should apply and the form, content and timing of notification. The Commission also seeks comment on whether it should require notification to Information Service Providers (ISPs), like the alarm industry, that are directly interconnected with the ILEC and whether it would be helpful for incumbent local

exchange carriers (ILECs) to provide annual forecasts of expected copper retirements or other network changes and if so, to whom should they provide such forecasts.

AICC supports a requirement that customers must be given direct notice when a carrier intends to retire the copper facilities that serve the customer and the customer must be informed of the consequences of that action, including the fact that the customer will not have communication service during a power outage without a source of backup power. The notice should fully inform the customer of the cost, if there is one, to obtain backup power, and the obligations of the customer, if there are any, to maintain backup power, including purchasing and installing batteries. Notice should be provided well in advance of the retirement of copper facilities to provide customers with a realistic opportunity to object or otherwise provide comment to the Commission and/or to seek an alternative service provider. A notice period of a minimum of six months should be provided. ISPs that are directly interconnected with ILECs also should be provided with direct notice of copper retirement.

In addition, AICC supports a requirement that general notice to the community should be provided in an area with a planned copper retirement. AICC supports a requirement that ILECs file an annual forecast with the Commission listing the central offices in which they intend to retire copper during the year. In addition, an ILEC should be required to publish notice in the general media when it provides notice to customers that copper facilities will be retired in a specific area. The combination of these two notices will go far in allowing ISPs, like alarm companies, operating in the area with a planned copper retirement to be informed of the change and to work with the ILEC and their alarm service customers to ensure that alarm services will continue to operate properly once copper facilities are retired.

An Alternative Service, for Purposes of Section 214, Should be Functionally Equivalent to TDM-Based Service

The Commission seeks comment on possible changes to the Section 214 rules that govern the process when a telecommunications carrier (except for a wireless carrier) or VoIP provider seeks to discontinue, reduce or impair legacy services. Under the current rules, telecommunications carriers must indicate whether an alternative service is available when seeking 214 permission. In the NPRM, the Commission seeks comment on how it should update its rules to define what is adequate in connection with the technology transitions (in other words, what is an adequate alternative IP service when a carrier seeks to discontinue a TDM-based service; and what is an adequate wireless service when a carrier seeks to discontinue a wireline service). The Commission asks whether and how it should consider attributes such as network capacity, call quality, device interoperability, 911 service, and call functionality when determining whether a service is an adequate substitute for a retail service a carrier seeks to discontinue.

AICC contends that the Commission should consider the attributes it lists when determining whether a service is an adequate substitute for a retail service a carrier seeks to discontinue. In addition, the Commission also should consider whether the alternative service is functionally equivalent to traditional TDM-based telephone service with respect to dialing, dial plan, call completion, carriage of signals and protocols, and loop voltage treatment and whether it includes eight (8) hours of standby power supply capacity for provider provided CPE and twenty-four (24) hours of standby power supply capacity for the network provider's facilities, both field deployed and at the central office or equivalent facility. These standards will ensure that service providers using new technologies continue to meet the rigorous quality assurance,

operational stability and consistent features that were the hallmarks of the traditional networks operated by telephone companies. Further, AICC contends that an alternative service that results in a change in 911 service, device interoperability, or call functionality that is available to the consumer, or that fails to provide the consumer with the ability to maintain communication service during a power outage, would result in a reduction or impairment of service sufficient to deny a request for Section 214 discontinuance of service.

Collaborative Industry Efforts Should be Encouraged And Supported with Commission Action

The Commission states that it is interested in learning about means by which "carriers and other industry segments can work collaboratively to ensure that new services meet the expectations and needs of consumers" before any Section 214 discontinuance occurs. The Commission points to ADT LLC dba ADT Security Services' (ADT) statement that "'the alarm industry is working with IP communications service providers to develop technical agreements that base their communications on Managed Facilities-Based Voice Network (MFVN) standards' to ensure that alarm monitoring systems already in consumers' homes can transmit alarm signals properly during emergency situations." The Commission asks for comment on progress in developing and implementing the MFVN standards and other standards or initiatives that may ease the transition to new services. The Commission also asks if there is anything it can or should do to facilitate the development and implementation of such solutions.

As stated by ADT, individual members of the alarm industry and AICC and its members have worked with telecommunications carriers and broadband providers over the years to raise and to try to resolve issues of concern to the alarm industry. The alarm industry has had some success in trying to resolve issues on a voluntary basis. While some carriers and broadband

providers have been very cooperative, others have not. In addition, even when technical fixes have been developed and agreed to by the parties, in some cases, they are not effective over time as network changes such as firmware upgrades are implemented, or new installation personnel are utilized. Thus, while AICC and the alarm industry intend to continue its efforts, an entirely voluntary process has not been sufficient to "ensure" that alarm monitoring systems can transmit alarm signals properly during emergency situations.

The rule changes supported by AICC in these comments should help to ensure that consumers have access to communication services that are compatible with alarm services before TDM-based services can be discontinued. In addition, however, AICC encourages the Commission to make available a process where the parties could discuss their issues and/or differences with the Commission to try to reach a resolution when a voluntary process is unsuccessful.

Conclusion

As TDM-based networks are transitioned to both wireline and wireless Internet Protocol (IP)-based networks and with the advent of alternative communication providers and services, it is imperative that communications networks and services are reliable, no matter the technology, that those networks are consistent, and that consumers understand the nature of any changes to their communications service, especially those that may affect the consumers ability to reach emergency services. In furtherance of these objectives, AICC urges the Commission to adopt the backup power requirements and the notice requirements in connection with copper retirement

proposed herein. In addition, AICC urges the Commission to define an alternative service, for purposes of Section 214, as functionally equivalent to TDM-based services, as discussed herein.

Respectfully submitted,

ALARM INDUSTRY COMMUNICATIONS COMMITTEE

/s/ Louis T. Fiore
Chairman

Dated: February 5, 2015